

**IOWA DEPARTMENT OF TRANSPORTATION**

To Office Bridges and Structures Date March 1, 2008  
Attention All Employees Ref No. 521.1  
From Gary Novey  
Office Bridges and Structures  
Subject MM No 189 (Revision to CADD note E189/M189)

The following CADD note has been revised.

Electronic copies are available in the following Office of Bridges and Structures standard directory **W:\Highway\Bridge\Standards\Bridges** and on the Internet:

<http://www.dot.state.ia.us/bridge/standard.htm>

The table was revised to fit the plan note sheets more efficiently.

**E189: Reinforcing, English designation on plans**

THESE BRIDGE PLANS LABEL ALL REINFORCING STEEL WITH ENGLISH NOTATION (5a1 is 5/8 inch diameter bar). ENGLISH REINFORCING STEEL RECEIVED IN THE FIELD MAY DISPLAY THE FOLLOWING “BAR DESIGNATION”. THE “BAR DESIGNATION” IS THE STAMPED IMPRESSION ON THE REINFORCING BARS, AND IS EQUIVALENT TO THE BAR DIAMETER IN MILLIMETERS.

ENGLISH SIZE:	3	4	5	6	7	8	9	10	11
BAR DESIGNATION:	10	13	16	19	22	25	29	32	36

**M189: Reinforcing, Metric designation on plans**

THESE BRIDGE PLANS LABEL ALL REINFORCING STEEL WITH “HARD METRIC SIZE”. THESE “HARD METRIC SIZE” BARS ARE NOT AVAILABLE. CURRENTLY THE INDUSTRY IS FURNISHING REINFORCING BARS WITH A “SOFT METRIC BAR DESIGNATION”. ALL “HARD METRIC SIZE” REBARS SHALL BE CONVERTED TO REBAR WITH THE NOTED “SOFT METRIC BAR DESIGNATION”. THE SPACING OR PATTERN OF BAR PLACEMENT SHALL BE AS SHOWN IN THESE PLANS, AND NO CHANGES IN THE SPACING OR THE PATTERN WILL BE ALLOWED WITH THE SUBSTITUTION.

THE “SOFT METRIC BAR DESIGNATION” IS THE STAMPED IMPRESSION ON THE REINFORCING BARS, AND IS EQUIVALENT TO THE BAR DIAMETER IN MILLIMETERS.

ALL REINFORCING BARS SHOWN ON THE PRESTRESSED CONCRETE BEAM DETAIL SHEETS ARE LABELLED WITH BAR NOTATIONS CONSISTENT WITH THE “SOFT METRIC BAR DESIGNATION” SHOWN IN THE TABLE BELOW AND NO CONVERSION FROM HARD METRIC SIZE IS REQUIRED.

HARD METRIC SIZE:	*	10	15	20	*	25	*	30	35
SOFT METRIC BAR DESIGNATION:	10	13	16	19	22	25	29	32	36

\*NO EQUIVALENT “HARD METRIC SIZE”

If you have any questions on the updated sheets, please check with Thayne Sorenson or Dean Bierwagen.

GAN/dgb/bj